

## **SBOH school environmental health rule review draft notes** **20 March 2003**

compiled from comments received and research by  
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Comments from Julie Awbrey, Spokane Regional Health District

Comments from Darrell Cochran, Thurston County Public Health and Social Services

Comments from Jim Green, parent with construction expertise

Comments from Public Health- Seattle & King County (PHSKC)'s rule review process notes and success stories.

**On January 8, 2003 the State Board of Health requested that Board staff prepare and submit a rule review document to the Board by July 2003 that includes the following elements:**

### **1. Review of WAC 246-366 with respect to results achieved and outcome measures.**

Everett School District's Indoor Air Quality Program has established **thermal and IAQ performance criteria** for school facilities that can be used as outcome measures for achieving WAC 246-366 ventilation, heating, and temperature controls. (ESD's IAQ Program manual available at [http://www.doh.wa.gov/sboh/Meetings%202002/2002-10\\_09/Tab12\\_GJefferisIAQP.pdf](http://www.doh.wa.gov/sboh/Meetings%202002/2002-10_09/Tab12_GJefferisIAQP.pdf))

The EPA IAQ Tools for Schools materials include **standards and guidelines for typical indoor air pollutants** (IAQ Coordinator's Guide, Appendix E, available at <http://www.epa.gov/iaq/schools/tools4s2.html>).

The Government of Hong Kong's Architectural Services Department has proposed "Recommended IAQ Objectives for Office Buildings and Public Places in Hong Kong" that include CO<sub>2</sub>, CO, Formaldehyde, total VOCs, airborne bacteria, temperature, relative humidity, and other parameters. (See [http://www.chps.net/info/iaq\\_papers/PaperIX.1.pdf](http://www.chps.net/info/iaq_papers/PaperIX.1.pdf).)

Maximum sound levels are listed in WAC 246-366-110 and minimum light intensities listed in WAC 246-366-120.

⇒ What specific results and measurable outcomes do you recommend including in rule, or including in guidance?

We recommend leaving both the rule and the DOH-OSPI K-12 Health and Safety Guide as is. Please refer to the remaining questions, specifically number nine, for rationale.

**Rule should include:**

- minimum standards regarding IAQ, with stringent penalties
- require proper building of schools and occupancy inspections by competent person
- notification of parents, students and teachers of IAQ problems

⇒ How useful is the DOH-OSPI K-12 Health and Safety Guide?  
Can it be made more useful in achieving results and providing outcome measures? How?

**Identify gray areas and adopt minimum levels as rules, not recommendations.**

**Send letters and emails to all concerned parties (schools) informing them that DOH-OSPI K-12 School Health and Safety Guide is the current reference in Washington State.**

The document needs to be condensed into a more workable guideline.

(Note: Thurston and Spokane health departments have developed documents, plan review and pre-opening checklist and an inspection checklist, that may be useful to other health departments – updated versions should be available soon.)

⇒ Should elements of the guide be included in rule?

**Yes.**

⇒ Should the guide be references in rule (three people have recommended this)?

**Yes.**

**This guide has been very helpful** since its development a few years ago. During the process of developing the guide input was provided from school officials, school parent organizations, advocacy groups, and health agencies. The process in developing the guide and the product has helped provide a tool for school districts and local health departments to use for consistent application of the regulation. **The guide can be used by school districts as a “self-inspection check list” for school staff to determine how well they are doing in meeting their compliance responsibilities**, especially where there is no local health department school health and safety program oversight.

The Health and Safety Guide is an excellent resource. There are three things that can be done to make it more useful: **a) make it more user-friendly, b) provide training, and c) promote its use:**

- a- The document's format makes it awkward to use in the field. We are one of the agency's that piloted the first edition. We are *not* suggesting a formatting change to the document itself, but rather **incorporation of the information into a better field tool**. We have taken information from the document and developed a more **user-friendly inspection worksheet**, which we utilize in the field and give to schools for use during self-inspections. The main benefit of our inspection worksheet is that we've broken the document into sections that allow a logical progression through a school, e.g., front office, classroom, custodial/maintenance, animals in the classroom, playgrounds, etc. This allows schools to portion out the document to appropriate staff for efficient self-inspections, and eliminate what does not pertain to their school, e.g., playgrounds at a high school. The bottom line is that it makes the document less overwhelming to schools.
- b- We coordinate technical training for schools and staff so everyone understands the Guide and is looking at items from the same perspective. We cannot recall any standardized technical training provided by DOH or OSPI regarding the document. DOH and OSPI did provide initial training to *public* school administrators when the first edition was released, but the training was not widely open. We believe technical training is one of DOH's central responsibilities.
- c- Our impression is that the document's use in Spokane and the surrounding counties is a direct result of the concerted efforts by both ESD101 and Spokane Regional Health District to promote its use and distribute copies. When the first edition of the document was distributed by DOH/OSPI, private and parochial schools were left out of the loop. The second edition was not even printed at the state level. While the document is available on line, some of the small schools do not have internet access, so it is left up to the local agencies to print and distribute the guide. We appreciate the time and effort spent by DOH and OSPI to develop the document, but perceive that after development the entire training and distribution responsibility was inappropriately completely passed on to local health jurisdictions (LHJ's).

**The guide should not be included or referenced in the rule.** Once referenced, it must go through the rule-making process, which would be too long and cumbersome for such a large document. In addition, it references quite a number of rules. If the document were incorporated into or referenced by the WAC, it would eliminate the ability to effectively keep it updated. (Also see response to question number nine.)

## **2. Review of WAC 246-366 and other relevant rules with respect to identification of a responsible party during construction and capital improvement projects.**

WAC 246-366 does not identify responsible parties during construction and capital improvement projects. Before construction, boards of education are responsible for obtaining health officer site approval and plan reviews and recommendations. After construction, health officers are responsible for preoccupancy inspection to determine its conformity with the approved plans and specifications.

The Attorney General of Washington recommended in 1996 that:

- SPI should establish a single entity responsible for monitoring architects' compliance with school construction plan revisions and to serve as a clearinghouse for all agencies involved in inspecting school facilities
- School districts hire an experienced owner's project representative to remain on-site during construction and capital improvement projects, and for 3-6 months after construction is finished  
(see [http://www.wa.gov/ago/pubs/construction/report\\_construct.html](http://www.wa.gov/ago/pubs/construction/report_construct.html)).

These recommendations were also made by a concerned parent.

We have conducted plan review for both public and private schools since 1982 in Thurston County. Thurston County staff have attended training in plans review, ventilation design and construction, on-site sewage design and construction, water system design and construction, food service kitchen design and construction, science laboratory design, and playground design and construction and continue to apply that training and expertise to plans that are submitted for review to the department. We hope that local health departments who have a demonstrated ability to provide this service will be allowed to continue.

**The first Attorney General's recommendation above should be implemented to identify responsible parties. The second AG recommendation should be adopted as rule. The person must be a competent person with responsibility attached.**

⇒ What are other relevant rules?

Note: no input received yet – I'll be meeting with OSPI staff to identify additional relevant rules, and will email this information to the group.

### 3. **The appropriateness and practicality of plan review requirements and the pre-occupancy review process for new school construction or for school remodeling projects.**

Plan review requirements and pre-occupancy review processes seem to be appropriate and practical for the LHDs who have the capacity to do them adequately. They may not be appropriate and practical for those LHDs without adequately trained staff. There seems to be variation in how practical and appropriate they are to school districts.

⇒ What would make WAC 246-366 plan review requirements and pre-occupancy review processes more practical and appropriate to both the LHDs and the SDs?

**One tool that has served our department well over time has been various versions of a plan review and pre-opening checklist.** A school plan guide could be developed that would assist architects, engineers, school officials and local health departments in meeting the requirements and “streamlining” the process for efficiency and compliance.

Schools, architects, building departments, and Spokane Regional Health District have effectively worked together for more than a decade to navigate the construction process. **Early and frequent communication are the keys to success.** For example, we have **provided architects and schools with regulations and checklists** so they are aware of the scope of our review; **they, in turn have provided us with 50% or 80% plans**, in addition to construction meeting minutes so we can comment early if we have concerns.

In our experience, the lighting and sound level sections of the rule (WAC 246-366-110 and 120) are the most challenging for architects and engineers. Our recommendation would be for **DOH to provide technical references and guidance for distribution to the school community.** If there are portions of the WAC that are obsolete, it would be appropriate for DOH to issue a blanket waiver from these requirements.

**It is imperative that LHJ's remain involved in the entire construction process.** Other agencies do not conduct their review based on curriculum, so may not require necessary safety items such as hoods or eye washes. In addition, no other agency reviews playground equipment prior to installation.

**Rule should include:**

- **Identification of responsible parties**
- **Requiring competent persons**
- **Stringent fines, penalties, and/or loss of funding for all involved in non-compliance and incompetence**
- **Educators should not oversee construction projects**
- **Maintenance should not perform construction projects**

#### **4. The presence and usefulness of communication criteria related to health related school closures and remediation actions.**

Communication criteria are not included in WAC 246-366. They are vital to successful management of school environmental health issues, however, as illustrated by information submitted by Public Health-Seattle & King County staff and by Kittitas County Health Department staff. Public testimony received by the state board of health on school indoor air quality concerns recommended improved communication between government agencies and communities (teachers, students, parents).

EPA's Tools for Schools kit includes communication recommendations (available at <http://www.epa.gov/iaq/schools/tools4s2.html>).

SBOH staff interviews of 4 SD and 4 LHD staff found that criteria for health related school closures varied, as did methods for communicating these criteria and decisions. SD staff recommended that SDs should develop and implement communication plans, and LHD staff recommended improving interagency communication. Both recommended better communication with the public regarding responses to EH concerns, early on in the process.

Existing RCWs give school boards of directors and the superintendent of public instruction authority to develop communication criteria, but don't specifically refer to communication criteria for health related school closures and remediation actions:

RCW 28A.320.015 gives school boards of directors the authority to "promote the effective, efficient, or safe management and operation of the school district."

RCW 28A.300.040 gives the superintendent of public instruction authority to "have supervision over all matters pertaining to the public schools of the state."

RCW 28A.320.125 requires the superintendent of public instruction, in consultation with many others, to "provide guidance to school districts in developing comprehensive safe school plans for each school." The guidance shall include a comprehensive school safety checklist.

RCW 28A.335.020 requires school district boards of directors to "adopt a policy regarding school closures which provides for citizen involvement before the school district board of directors considers the closure of any school for instructional purposes."

SPI and school district superintendents and board are involved in determining school closures and allocation of funds (WAC 392-129-100 through 150). SDs must communicate specific information to the SPI:

**WAC 392-129-140 School emergency closure -- School district application to the superintendent of public instruction.** A school district applying for continuation of state support during a school emergency closure will submit the following information:

- (1) The name of the school district;
- (2) The name of the superintendent of the school district;
- (3) A statement signed by the superintendent that the school district board of directors has reviewed the application and supports its submittal;
- (4) The name(s) of the individual schools which did not operate;
- (5) The unforeseen natural events, mechanical failures, or actions or inactions by one or more persons which caused the school emergency closure;
- (6) The specific dates of the school emergency closure; and
- (7) The specific dates that the school district has scheduled to make up the lost days.

**WAC 392-129-090 Definition -- District-wide emergency closure.** As used in this chapter, "district-wide emergency closure" means that all school buildings in the school district are unsafe, unhealthy, inaccessible, or inoperable due to one or more unforeseen natural events, mechanical failures, or actions or inactions by one or more persons.

**WAC 392-129-100 Definition -- School emergency closure.** As used in this chapter, "school emergency closure" means a school in the school district comprised of more than one school that is unsafe, unhealthy, inaccessible, or inoperable due to one or more unforeseen natural events, mechanical failures, or actions or inactions by one or more persons.

⇒ Are there specific references to communication criteria related to health related school closures and remediation actions in WAC? How useful are they? How can their usefulness be improved?

Unknown.

**Communication criteria should be in rule** or they won't happen. The following should be included in rule:

- o Full disclosure and dissemination of all information regarding school environmental health issues, good and bad, to all stakeholders in a timely manner (immediately). No downplaying of problems when notifying stakeholders. All taxpayers in school district need to be notified, not just pro-district people. Full public disclosure is needed.
- o Creation of a "One-stop-shop" with auto forward to the right agency.
- o There needs to be accountability.

School Boards need to be discouraged from managing school environmental health behind closed doors. There needs to be a place to go when their methods are wrong.

SPI needs to be contacted about school EH issues.

⇒ Should communication criteria for health related school closures and remediation actions be included in WAC 246-366?

**No.** Based on previous experience, we agree with other LHJ's and schools who have stated that criteria for health-related school closures varies, as do methods for effective communication. Each school, school district, and LHJ have different resources and methods of operation. **Communication plans should be developed through collaborative efforts between schools and LHJs.** This is one of many reasons why LHJ's and schools should focus on developing good working relationships.

⇒ Should communication criteria for health related school closures and remediation actions be included in the DOH-OSPI K-12 Health and Safety Guide?

**This area is one that is critically lacking.** During my twenty years of work in this program I have had to address issues such as asbestos, lead, mold, food borne outbreaks, indoor air, school sewage system failures, drinking water health alerts, animal bites, bat exposures, and high absentee rates. These issues if not communicated properly reduce trust, heighten anxiety, and promote an extremely stressful environment for all parties. **This area must be addressed in any rewrite of the current regulations**

**No.** The Health and Safety Guide already references EPA's Tools for Schools, which includes communication recommendations and sample forms. We feel this is adequate.

**Yes,** and the guide should be in rule.



## 5. The frequency and scope of inspections.

A DOH survey of LHDs found that approximately 25% of schools in the state are never given a comprehensive inspection per WAC 246-366. No LHDs conduct comprehensive inspections more often than once a year. Approximately 90% of LHDs indicated they had conducted issue specific inspections -- most frequent were food service inspections and responses to complaints.

The DOH survey also found that the number of FTE's committed statewide is limited -- designated school program staff made up a total of 7 FTEs, of approximately 450 EH staff at LHDs (less than 2% of LHD EH staffing).

⇒ Should inspection guidelines reference the DOH-OSPI K-12 Health and Safety Guide? Should there be additional inspection scope and frequency recommendations, or requirements?

**The inspection guidelines should reference the DOH-OSPI K-12 Health and Safety Guide. I think the inspection frequency schedules should be indicated. Consideration could be given to those school districts that have some type of "self-inspection" program.**

When the Health and Safety Guide was developed, it was our understanding that LHJ's were committed to utilizing the document as an inspection reference/tool. As part of DOH's responsibility for technical support, we suggest they reiterate that to LHJ's and **provide necessary training for its utilization.**

**We recommend against additional inspection scope and frequency recommendations.** The current verbiage in the rule is "periodic". In addition, the **School Facilities Health and Safety Advisory Committee recommended an inspection frequency *range* of one to three years** (this can be found in Appendix B of the Health and Safety Guide). Additional requirements or recommendations beyond this would be viewed by LHJ's as an unfunded mandate. LHJ's need flexibility in order to effectively utilize the expertise and resources they have available.

**Inspection scope and frequency must be in rule. Inspections should be unannounced, more frequent, and done by competent inspectors. Inspections should be standardized.**

**6. A timeline and outline for any rule updates or revisions recommended in the rule review.**

So far I have received recommendations to revise and update WAC 246-366, from the DOH 1998 rule review, LHD and SD staff. It's too early in the process to propose a timeline.

⇒ Should the WAC 246-366 be revised? If yes, are there recommendations for a draft timeline for the rule revision?

During the revision a review will, hopefully, identify outdated and conflicting sections that can be removed or changed to reflect newer requirements. There are two major Environmental Health regulations currently under review at this time, therefore, **I would suggest that the process start in the fall and continue into 2004.**

There is no true enforcement authority in the regulations. The only quasi enforcement is during construction activities that require LHJ approval as a criterion for receiving state matching funds. LHJ's act more as consulting agencies and are under mandate to *advise* school administrators of requirements and recommendations. Therefore, what is truly needed is a reference tool/guidance document for LHJ's and schools to use, rather than a new rule.

We already have that. The K-12 School Health and Safety Guide is an excellent tool and is relatively new in the school community. While there are **some portions of the WAC that are obsolete, we feel it is more prudent at this time for DOH to identify those areas and issue blanket waivers from the WAC, rather than to open the entire rule.** We would additionally recommend that DOH **concentrate its resources on training and distribution of the Health and Safety Guide** so all LHJ's and schools are on the same page. The document has not been in circulation long enough to determine its effectiveness when used by the entire school community.

**The rules should be revised as soon as logistically possible. How about requesting compliance by recommendation in the meantime?**

### **Additional related recommendations:**

#### **1. Create a regional or state school program for school plan reviews and inspections.**

There's an increasing need for more specialized knowledge and expertise, but capacity to have adequately trained staff is limited in some smaller local health departments. This results in limited value to the schools when these LHDs do plan reviews and inspections.

Public Health-Seattle & King County, a large LHD, sent in examples of their contribution to school environmental health through:

- Investigation of source of student and staff complaints, identification of problems, and recommendations (that solved problems)
- Coordination of communication with public and school district staff
- Encouraging documentation of health complaints, by school nurse and other staff.
- Improving school nurse's knowledge of school EH related events
- During preoccupancy inspection incorrect product use was identified, which had caused health complaints among staff who had moved in early.
- Investigation of student complaints, identification of problems, maintenance recommendations and follow-up (that solved problems)

A 1996 DOH survey found that 19 of 32 LHDs with approximately 25% of the state's schools were not implementing WAC 246-266 safety and facility components, such as inspections. The survey identified barriers to implementation, ranked with the most important first:

- lack of staff resources
- lack of revenue base
- lack of cooperation from school districts
- lack of political support

Comment: In the case of noncompliance:

- o there should be stringent fines
- o implementation should be taken out of their hands and subcontract with a competent professional, who must be liable to taxpaying public not to LHD or SD.

LHDs who do not have qualified personnel should not be doing occupancy checks on schools. Competent persons should be utilized in the various specialty areas.

School district stakeholders in PHSKC's rule review process have also expressed the need for health inspectors to be more knowledgeable.

PHSKC success stories indicate the value of LHDs in school EH:

- PHSCK staff identified physical problems with building and building maintenance that caused health symptoms among students and staff
- PHSKC staff issued a log to interested staff to record events and worked with school nurse to improve knowledge and data collection
- PHSKC staff distributed findings to all interested parties, held a public meeting
- Thousands of dollars were previously spent on a private consulting firm...
- Had PHSKC staff been called in earlier there could have been fewer lost school days, doctor visits & tests, money spent on consultants, etc.

In another example of responding to complaints, PHSKC staff identified maintenance problems that were linked with odor and health symptoms.

At a preoccupancy inspection PHSKC staff found that a high VOC product was being used inappropriately, causing health symptoms in several staff that had moved in early. The school district eliminated the problem before moving students in.

## **2. Cooperative or regulatory approach to rule implementation?**

The DOH rule review reports two perspectives from the regulated community:

- a. They want a cooperative approach where LHDs advise them about how they can improve school safety
- b. They cannot afford to comply with "recommendations" no matter how sound. Budgets and resources are tight, there are significant competing interests, and unless they are required to comply, the resource managers cannot justify shifting available resources to comply with a recommendation.

## **3. Use soil contamination data in school site approvals.**

Department of Ecology has information on lead and arsenic contamination, and hazardous waste clean up sites and programs that should be considered when siting schools and playgrounds, and in examining impacts on school environmental health.

Comment: consideration of this information should be in rule.

## **4. Proper disposal of school laboratory chemicals**

Department of Ecology and the Environmental Protection Agency fund local governments to assist proper waste management of school lab chemicals.

## **5. Track pesticide use on and near school grounds.**

Department of Ecology tracks pesticide use on and near schools, but doesn't have the resources or specific rules or statutes to more than track this information. Schools and their communities could use this information to improve pesticide use policies, thereby improving school environmental health.

Comment: there should be rules to govern use of pesticides and to promote natural landscape as opposed to high maintenance lawns and shrubs.

## **6. Data collection**

There needs to be documentation and tracking of buildings with IAQ problems. Underreporting of IAQ problems, health concerns, and injuries needs to be addressed. There should be stiff penalties for underreporting, especially for IAQ problems. Need to identify sources of IAQ problems, levels, minimum standards, and legally responsible parties.

## **7. Schools built right from the start**

It's important to build schools right from the start with qualified people overseeing, not in the hands of school personnel who are not qualified.

## **8. Funding issues**

Tax money is used for schools, therefore we are all responsible for construction. Even before our current economic crisis recommendations have been put aside. Because of today's finances and tight budgets it is worse - therefore the only way of achieving positive results is through rule change and utilization of competent persons in the various specialty areas.

The high cost of retrofitting schools and mitigating IAQ problems are why there should be more stringent fines and penalties for rule violations, and why competent inspectors are needed to ensure proper construction and maintenance.

## **9. Need for stricter standards**

Because students are exposed, as well as adults, standards need to be stricter than they would be for adults, due to their greater vulnerability to exposures. Specific contaminants should be identified and quantified. All elements must be enforced.

## **Draft review of 246-366 WAC:**

See "SBOH Chapter 246-366 WAC rule review" draft notes for comments.

**Some other relevant statutes and rules:**

See rules referenced above, also.

⇒ What additional relevant statutes and rules should I research?

**RCW 70.162**, indoor air quality in public buildings:

- Directs L&I to review indoor air quality programs in public schools administered by the SPI and the DSHS.
- Directs the state building code council to review state building code to determine adequacy of current mechanical ventilation and filtration standards
- Says the SPI may implement a model indoor air quality program in a school district selected by the superintendent.

Comment: L&I needs to be more proactive, set lower levels for children, and encourage implementation of model IAQ programs.

**RCW 19.27** state building code and **WAC 51**, ventilation and indoor air quality, energy code, and building code guidelines.

**WAC 180-26-020** requires that the superintendent of public instruction and the school districts conduct reviews and evaluations of new sites for new and existing state assisted projects. This includes consideration of students' health and safety.

**WAC 180-27-080** requires value engineering studies, constructability reviews, and building commissioning for projects larger than fifteen thousand square feet but less than fifty thousand square feet.

Building commissioning is defined as the process of verifying that the installation and performance of selected building systems meet or exceed the specified design criteria and therefore satisfy the design intent. Building commissioning shall include a physical inspection, functional performance testing, listing of noted deficiencies, and a final commissioning report. Building commissioning shall be performed by a professional agent or authority not contractually or otherwise financially associated with the project design team or contractor. A district shall be eligible for state assistance for a value engineering study, a constructability review, and building commissioning for each qualifying project.

**WAC 180-27-535** requires school district boards to evaluate existing building conditions and report these evaluations to OSPI as a condition of receiving state construction assistance.

Comment: should report to taxpayers, also.

**WAC 180-27-605 Emergency repair grant applications -- Contents of applications.** The state board of education may allocate any funds specifically appropriated for this purpose by the legislature to school districts for emergency repair projects for school buildings which present imminent health and safety hazards for building occupants in accordance with process and eligibility criteria.

One criteria is authorization of emergency repairs:  
Certification by a health officer, fire official, building official, labor and industries official, or other independent and competent authority that an imminent health and safety hazard to building occupants of a specified nature and extent exists unless the emergency repairs are made.

A fund should be created from lawsuit won, and funds doled out by school district for appropriate use. There should be accountability in use of the funds.

**WISHA and WAC 296-62 occupational health standards** includes air contaminants, asbestos, biological agents, physical agents, sound, hazardous lab chemicals, and more.

Designed to protect all employees and address the range of work activities to which adults are typically exposed.

Some online resources:

Washington laws (RCWs) and rules (WACs) are available at [www.leg.wa.gov](http://www.leg.wa.gov).

The DOH-OSPI K-12 Health and Safety Guide and other relevant information is available at <http://www.doh.wa.gov/ehp/ts/school.htm>.

The Collaborative for High Performance Schools has many interesting documents, available online at <http://www.chps.net/>.

EPA's [National Best Practices Manual For Building High Performance Schools](http://cfpub.epa.gov/schools/index.cfm) and other useful documents are available online at <http://cfpub.epa.gov/schools/index.cfm>.